

Notice of Allowability

Application No.

10/025,776

Examiner

Daniel E Valencia 10/17/03

Applicant(s)

KAMBE, TOSHIYUKI

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Communication filed September 12, 2003.
2. ☒ The allowed claim(s) is/are 1-25, 33, 34, 37 and 38.
3. ☒ The drawings filed on 26 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Applicant's communication filed on September 12, 2003 has been carefully studied by the Examiner. The arguments advanced therein are persuasive and the rejections based upon prior art made of record in the previous Office Action are withdrawn. All of applicant's claims are now allowable. Examiner would also point out that new claims 37 and 38 were added in Applicant's communication filed June 10, 2002; however, no claim 36 was ever filed. The allowed claims have been renumbered to reflect this error.

Allowable Subject Matter

Claims 1-25, 33, 34, 37, and 38 are allowed.

The following is an examiner's statement of reasons for allowance: For reasons for allowance regarding independent claims 1, 6, 20, and 22, see the Office Action mailed out March 21, 2003 (Page 4 and 5).

As to independent claim 18, the prior art alone or in combination fails to disclose or render obvious a waveguide-type optical control device comprising: a phase shifter comprising two left and right optical waveguides, a first electrode provided on the left side of the left optical waveguide, a second electrode provided on the right electrode provided between the two optical waveguides; first directional coupler that is connected one end the phase shifter and functions to branch an optical signal introduced through one of the two optical waveguides into optical signal parts which are then introduced

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respectively into the two optical waveguides; a second directional coupler that is connected to the other end the phase shifter and functions couple the optical signal parts received respectively from the two optical side of the right optical waveguide, and waveguides, at least one of the first and second electrodes and the third electrode having been extended into a part the whole of the first directional coupler the second directional coupler. Regarding the Thaniyavarn reference, it would not have been obvious for one of ordinary skill in the art to extend the electrodes into the directional couplers to meet the claims for two reasons: (1) Thaniyavarn designates specific lengths of the electrodes thus not making it possible to achieve both the desired length of the reference and extending the electrodes into the directional coupling region required by the claim, and (2) Thaniyavarn designates specific voltages on the different electrodes corresponding to the phase shifting region and the directional coupling region respectively. The second reason implies that electrodes 362 and 352 have two different voltages, which would not be a possibility if the two electrodes were one extended electrode.

Likewise, claims 19 and 33, require at least one electrode being extended from the phase shifting region into the directional coupling region; therefore, they are patentable for the same two reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

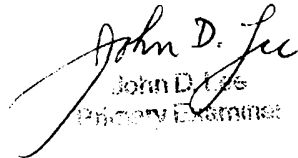
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E Valencia whose telephone number is (703)-305-4399. The examiner can normally be reached on Monday-Friday 9:30-6:00.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.



DEV



John D. Lee
Primary Examiner